

The Digital Street Lab in a Box

A tool-kit for surviving in the contemporary public space

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This paper describes two workshops raising awareness of the complexity of the interactions between digital and non-digital space, networks, devices, and systems. The exercises are included in broader research that deals with the human condition in the contemporary and future cities, focusing on the relationship between public space and weaponized data as a threat but also as an opportunity to act. A new way to understand and operate the street must be developed, with new epistemic assemblages, which allow us to avoid dystopian or technocratic visions in order to think collectively in our future human habitat. We offer here a toolkit, a series of strategies, to cope with the overwhelming complexity and act. The research is still open and the present paper shows the most recent experiences of a twenty-year journey.

0. The city is quickening. We hover between built space and media places. Placemaking that takes no heed of the knowledge environment is no longer pertinent or relevant. In the era of the fourth industrial revolution and pervasive computing, we need better strategies to deal with the built environment, establish a meaningful presence in it and eventually to produce it. The technological forces currently in play are uncontrollable: uncontrollable by those who have designed them, and uncontrollable by those who own them -this is the new means of production-. What this means to us is that we no longer have the capacity of a synoptic vision. The omniscient presence and mediation of software in every aspect of human life and interaction. Its effect on what is often claimed as the space of interaction par excellence is what we have called “the Algorithm that ate the Street” (Guzzardo, 2008, 2012, 2018). A diagnosis of the urban habitat. Beyond the fact that we are un-

derstanding what is underway, the certainty that we are being changed as a result of these technological forces makes imperative the need to act.

Acting within a certain conceptual framework, a provisional diagnosis while recovering the reactions and indications of such intervention in the real world seems the only possible attitude in front of a fast-changing scene. Issues are conceptually identified but not intensely explored through design, design tools and thematic categories for any device on the street are also fragmentary and provisional. As a result, any pretension of a problem-solving strategy is futile. This is where the proposed attitude follows some metaphorical enunciations that characterize the action. Triage is our reference to a situation where diagnosis and therapy overlap. Recursion is a reference to provoked situations where a jump from the material reality of the world to the virtual places and mappings takes place as a therapy to the digital

bubble inhabiting. Such metaphorical references or conceptual extensions from different epistemic fields have been used as a way to set in motion the design processes that are the focus of our didactic experiences and are vectors that push the research, action, and production we call the DSLB.

1. The Digital Street Lab in a Box (DSLb) (Guzzardo, 2004b, 2018) proposes a new place-making action plan for a withering public sphere. It goes after the need to develop new epistemic assemblages - street probes and sensors- for navigating a landscape of space and information. It's best described as a tool-kit. Kit to be used in order to survive in the contemporary public space. The tools include hammers and triage devices, both are needed to deal with "weaponized data" (Cook, 2018) -those predictive machines whose goal is to create a perfect model of who you are, what you want, and what you are going to do-.

The central idea is an urban-stage for performance with roots in the non-physical public space which allows embodiment of that virtual realm and takes some eventful condition in the street. Finally, this is a strategy for awareness based on recursion, rooted in a provoked distortion, a disturbance in the system. This is intended to open thresholds between both layers/worlds/systems which are brought by the action of the metaphoric character of the "trickster" (Guzzardo, 2004a, 2012). The trickster a sort of culture system hacker, creates a disturbance that exposes by displacement the relations between both spheres.

The preparation of Storyboards that lead to this urban-stage is Among the list of the previous experiences. This could take different meanings according to what specific field of action undertakes their development. They could be programmatic enunciations for designers, situations for the development of performance stories for a theatrical performance group, an outline of spheres and digital/real world situations/data to be linked by programmers and developers, etc.

The DSLB storyboards can be best described as

a type of Media and Information Literacy Street Algorithm: a series of steps to visualize the impact that digital networks / the data cloud have on the city and ourselves. "Media and Information Literacy recognizes the primary role of information and media in our everyday lives. It lies at the core of freedom of expression and information - since it empowers citizens to understand the functions of media and other information providers, to critically evaluate their content, and to make informed decisions as users and producer of information and media content." (Grizzle et al., 2013). The DSLB storyboards were used in the workshops to introduce architectural student and professors to think in terms of MIL competencies. They provoked a recognition of: a) how the gale force of accelerated code is altering conduct and consciousness, b) how new infrastructures and interfaces on the street can cultivate MIL storytellers and audiences.

The development of the DSLB includes installations, workshops, and presentations all around the world since 2002 (Guzzardo, 2002, 2003, 2004, 2006, 2008, 2012, 2015, 2018). Each part of the path has gone through different aspects of the problem, from purely legal issues to multimedia artistic expressions, including work with designers and programmers. This paper focuses on the two most recent workshops made with a group of eighty students at the School of Architecture of the National University of La Matanza (UNLaM) and a group of more than a hundred students at the Architectural School of the University of Buenos Aires (UBA), and its outcomes. That includes the study of the literature around urban performance, street art, digital installations and multimedia artifacts (Agkathidis, 2014; Artopoulos, 2007; Augustynowicz, 2010; Briones, 2007; Canavezzi, 2013; Del Signore, 2009; etc.).

It is important to clarify that the specificity and scope of these exercises do not allow us to work on the totality of the program developed above. Each workshop functions as one more piece that is added to a larger whole, and that finally aims to reflect, raise awareness and call to action in relation to problems

that we consider to be critical. Acknowledging the difference between moments of definition and precision as opposed to moments of opening and exploration (metaphors, images, analogies), but rescuing their pedagogical and research function (tropology). Therefore, we defend the need for a certain degree of indeterminacy and openness to interpretation in the process of theoretical construction of the research work in progress.

2. The first workshop (UNLaM) was an open-ended experience. While a sequence of propositions was made to participant/surveyors/designers, many instances were redirected as the didactics unfolded. The original set of guidelines was roughly defined by the conceptual framework of our DSLB project and a set of activities that we understood would introduce an awareness of the issues in such a way that they could lead to an investigative and creative interest. The projected sequence was:

- Open a set of reflection/action activities that focused on the configuring power that technical-material networks (infrastructure) have on the configuration of public space.
- Establish a parallel for reflection/action between the effect and role that these physically present- although mostly invisible- infrastructures have had in our embodiment in public space , and the new and increasing presence and influence of Big Data, Social Networks, Surveillance Systems, etc. which by force of accelerated code are altering conduct and consciousness in a digital public space. A presence that is veiled for the simple observation of physical space, but that through the previous activity would be more easily accessible to them.
- Set in motion design actions that challenge their invisibility by putting forward their performative power as devices in the street. The initial goals were to make the networks of the urban fragment visible, to detect the devices and link the flow with their performativity.
- Exploring design possibilities for making vis-

ible at a performative, real-world level the presence of this public space, creating the opportunity to jump in a recursive cycle from one layer to the other.

The work began with the construction of cartographies of urban fragments based on inquiries, detection of signs, surveys, etc. They worked with different layers, based on a fixed use scheme. The survey was conducted by each group on urban fragments of approximately nine blocks based on the symbolic, political, social and cultural relevance of the territories. The kind of infrastructure or physical signs were often linked to what made the fragment relevant. Edition and enhancement of those signs that were surveyed were the strategies for making the networks and devices visible.

At this point, a connection through analogies and reflection on personal experiences with the presence of the "digital cloud" was introduced, and a more specific reference to the performative program included in the DSLB project was made through examples and review of what has been so far produced. In many cases, a connection was established between the site relevance and the first ideas for these performative proposals. This evolved in a design proposal with the intention of implementing an urban action. The cartography (the visibilized-unveiled) was the input to achieve a place-event oscillating between the performatic and the urban intervention.

The proposals insisted on experimental processes that develop determinations to make a semi-otic leap (Martin Iglesias, 2013). This leap is the transposition, from the existence of the unveiled network, towards the denaturalization of the fragment in order to operate it as an event. The design process built that transposition of senses to create action/installation -interphase and interface- in an immanent here and now. Therefore, the design focused on two aspects: the stage and the storyboard.

The stage, as a support for the technical-material elements of the project, is based on a kind of technological neo-baroque setting. The street, the pub-

lic space, is the stage. However, so is the device mounted on that given stage. In this case, the site was considered with its physical and non-physical pre-existences, which were operated or modified by design. Each project defined, based on its proposition, a scale of operation. From large infrastructural scale to a minimum interpersonal one.

Duration of the performative operation had different outcomes, from permanent presences in space to the mobile and ephemeral. The project proposal, the medium-device-event is designed (with its material characteristics) so that the site is performed as an edition of its pre-existing characteristics, qualities and meanings attached. The street as a stage goes back to the history of the city and a long line of theories about the construction of the city. However, it is particularly useful because it offers a simple metaphor for what happens on social networks or the digital “public space.” Furthermore, the need for this representation should be immediately understandable to architects and designers who think not only about the fixed but also about what happens/-takes place.



The narrative of the performance was developed in a storyboard format. Conceived as vaudeville or as theatre play it becomes an embodiment in the street that implies a jump from one layer to another in a recursive sequence. Real things and real bodies following create a displacement that breaks media bubbles. The link to the idea of the trick and the trickster oper-

ates here as an explanation of how the use of the designed devices and performative actions should work as an enticement, an event of discovery, an opening into an otherwise veiled dimension of the invisible networks in public space.

With a multimedia framework, the storyboard-script consisted of the description or narration of the actions that would be generated by the media-device-event. As a guide or criteria computer, we posed the following questions: What situations will the media-device-event generate? What actions? How will the user act with the artifact? What will the performative aspects of the physical action (actors creating actions and relationships) be? In short, in this script, the actions generated by intervention-performance and the consequences of those actions are designed. These consequences would be inferences or a series of inferences, assumptions of what is going to happen -the effects of interactivity- which must be written and represented in the storyboard-script.

The stage and the storyboard-script could then be explained differently with reference to the idea of the trick and the trickster. The physical support of the trick and the effect of the trick (inferences). How does the trick work? How does it perform? What effect does it generate? These questions point to the connection between the two levels handled by the trickster: visibility and invisibilization, as well as the connections or collaborations that the different types of networks have with each other. Finally, the students delivered intervention-performance projects in different formats and multimedia formats. In some cases, it was possible to advance in the staging of the project, so they also delivered the records of implementation and action, as well as the intervention and effects on the site.

The direct results were a series of storyboards (graphic anticipations of things foreseen, scripts that address time sequences and/or algorithms that generate events) in their different manifestations: drawings, videos, animations, stage designs, etc. These storyboards were then prepared collectively,

Figure 1
Image by Rodríguez_Pockay_
Rivero_Roldán
(UNLaM)

rewrapped with new editions, overlays, collages, and glitched-recordings. The results varied in quality and originality, but most of them fulfilled the main goals of the workshop. We were able to observe that the understanding of the complexity of contemporary public space increased significantly, as did the awareness of the need to act on it beyond the mere critical resistance.

Figure 2
Image by
Acosta_Vega_-
Carenzo_Petkovsek
(UNLaM)



This awareness implied not only the recognition of the impact of technologies on the discipline and the human habitat but fundamentally the design of performative alternatives on technological devices. The strategies deployed focused on multimedia experimentation and topological research (Martin Iglesias and Voto, 2019; Hillis Miller, 1991). The design work and modes of presentation tended towards hybridization of media and formats (Martin Iglesias, 2015). The wide range of possibilities spanned from the analogical edge of the physical model to computational simulation, including different collage, montage, image, and video editing techniques. This multimedia approach was instrumental in sustaining the simulation of the future urban installation/intervention.

The workshop focused on the strategies (not the issue, subject, content, object or results). Strategies to get out of common sense, or step out the naturalization of the contemporary human environment. The strategies are related to a playful attitude,

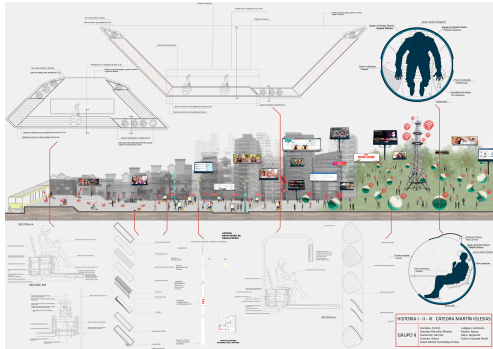
which can be represented by the trickster, the hacker, the homo ludens (Huizinga, 1955), the grave-merry man (Rahner, 1972), dodging the automated criticism. The workshop can be seen as an experiment in the sense that it does not attempt to confirm pre-established hypotheses, but instead seeks to generate perturbations in the system to measure and characterize its effects.

The strategies based on the disturbance of the system are the most appropriate for complex systems such as those that contain the human habitat. In a real holistic approach, we cannot fully understand complexity; you have to act and then draw conclusions, to recognize the dynamics, to react and to introduce changes in the system. We start from the human inability to fully know and understand the complexity and operate it. In this case, we worked with socio-technological systems, but it may apply to any system.

3. The second workshop (UBA) was called “urban retro-utopias in the global south” and was based on the results obtained in the previous workshop (UNLaM). Each project was assigned to a group of students with a description of their characteristics and objectives. These projects served as a starting point to reflect on the relationship between technical devices and urban space from a series of theoretical classes. The general framework of action proposed referred to the notion of retro-utopias to think of a relatively distant future that establishes paradoxical relations with the past (futurism burdened with anachronism), which characterizes most of the non-hegemonic expressions of our global south.

Then the guidelines of the practical activity were launched, which consisted in designing in greater detail and specificity the technical devices that appeared suggested in the projects of the previous workshop, with the purpose of advancing in the process that brings us closer to the actual materialization of the artifacts. This approach did not pretend to be pragmatic but proposed another drift through the notion of technical fiction. This notion served us so that the approach to the device was technical (look-

ing for precision and detail) at the same time that it contained a high degree of fictionality (which allowed us to design speculatively outside the logic of problem-solving).



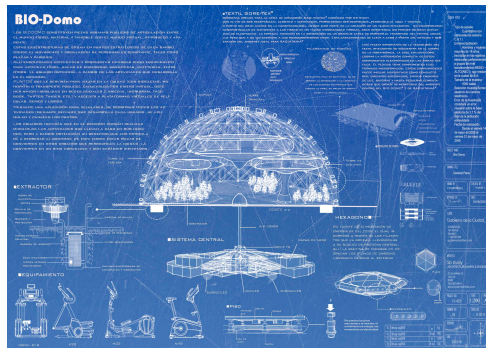
The final objective of the exercise was to produce the technical documentation (blueprints) of the corresponding to assigned projects. This technical documentation had to use the graphic language of the technical documentation (with all its clichés and stereotypes) to achieve the plausibility of the proposal. This verisimilitude aims to reinforce the feeling of the feasibility of these devices that are clearly fictional. For practical implementation, students were provided with access to folders in the cloud where they could find theoretical, architectural and technical-fictional references. These included texts by the authors, projects by Archigram, Superstudio, Alejandro Burdisio, Giovanni Battista Piranesi, Étienne-Louis Boullée, Leonardo Da Vinci, and other utopian architects, as well as examples of representations and illustrations associated with technical fiction.

The students began studying the assigned projects, and once they understood their purposes and the importance of the technical devices involved, they began to design these devices in more detail through hand drawings and digital models. The hybridization of media at this stage was intentional as it sought to construct a density of features and specs that could incorporate the fictional narrative of the

original projects. The process involved feedback between the speculative designs and the associated fictional narratives, which allowed proposed features to be shaped and enabled functions to be inferred from representations.

Finally, the elaboration of the fictional technical documentation (blueprints) of the devices belonging to each project was requested. This implied the use of semiotic strategies associated with the technical representations of mechanisms and machines, which are the ones that grant verisimilitude from the social and disciplinary imaginaries they summon. The use of irony and anachronisms (retro) allowed us to distance ourselves from the pseudo-objectivity proposed by the classical technical representations by using Monge geometry (plans, sections, axonometric and exploded views) to transform the design exercise and its representation into a critical operation.

The final results showed a great diversity of approaches but demonstrated that all had managed to critically reflect on human-device interactions and their relationship with urban spaces. We also verified the use of the theoretical and methodological tools suggested, as well as the awareness of the particularities that these interactions have in geopolitically subaltern countries, particularly in Latin America.

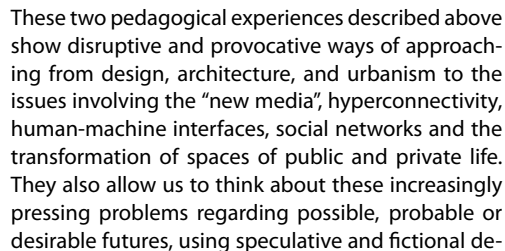


In terms of a contribution and/or step forward to bring DSLB to fruition, this workshop has created a reservoir of connections between the interpretations about data's presence in the street -as produced

Figure 3
Image by
Gonzalez_More_-
Lodigiani_Guiller-
met_Guzman_-
Guzzo_Gonzalez_-
Mantei_Suarez
(UBA)

Figure 4
Image by
Cucho_Demous-
selle_Diaz_Esco-
bar_Fazio_Fer-
reyra_Gonzalez_-
Kassis_Sarmiento
(UBA)

Figure 5
Image by
Saad_Auzqui_Mari-
one_Lencian_-
Aversente_Serra_-
Baigorria
(UBA)



Many questions remain open and we do not intend to draw general or generalizable conclusions from these exercises. We simply want to offer the account of these experiences in order to make it possible to replicate them in other contexts, with other contextual and material conditions, in order to promote the proliferation of works that reflect in a propositional and critical way on subjects that seem distant from the concrete practices of designers and architects, but that are increasingly urgent if we are concerned about our present and future human condition.

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